

Baseline Health Indicators for SSI and Foster
Children and Adolescents

≤ 21 Years old on Fee-For-Service Medicaid
CY 1999 (n = 10,712)

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July 2001

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Background:

This report analyzes baseline CY1999 hospital and emergency department health indicators for the 10,712 children and adolescents on fee-for-service Medicaid. Health indicators for children on SSI (n= 5,818) and foster children (4,894) are analyzed separately.

Methods:

This analytic file was created from the MMIS enrollment file (i.e., unduplicated count of children and adolescents ≤ 21 years old enrolled in Medicaid Fee-For-Service during CY1999) and MMIS paid emergency department (ED) and hospital claims. Enrollment data (i.e., age, sex, race, city of residence, and third party liability) was linked to hospital and emergency department claims data (i.e., date and length of service, primary and secondary diagnoses and amount paid). Hospital and ED claims were converted into unique hospitalizations and unique emergency department visits. Unique hospitalizations and emergency department visits were linked to enrollees and a person based file was created. This person based file included total # ED visits and hospitalizations, total amount paid for ED and hospitalizations, and total days in hospital.

Major Findings for 1999:

- There were 10,712 SSI and foster children on fee-for-service Medicaid in CY 1999. Males make up the majority of both SSI and foster children. 63.6% of 5,818 SSI children are males. 55.2% of the 4,894 foster children are males.
- Mental disorders are the leading cause of hospitalization for both children on SSI and foster children. 51.6% of the hospitalizations for SSI children are for mental disorders. 76.3% of the hospitalizations for foster children are for mental disorders.
- Injuries are the leading cause of emergency department visits for both children on SSI and foster children. 26.7% of the emergency department visits for SSI children are for injuries. 31.7% of the emergency department visits for foster children are for injuries.
- In 1999 9.1% of SSI children were hospitalized (n=532). 46.6% of these children had repeat admissions in the same year.
- In 1999 5.5% of foster children were hospitalized (n=271). 42.8% of these children had repeat admissions in the same year.

**TABLE 1: Characteristics of SSI and Foster Children and Adolescents
 ≤ 21 years old Enrolled on FFS Medicaid – CY1999
(n=10,712)**

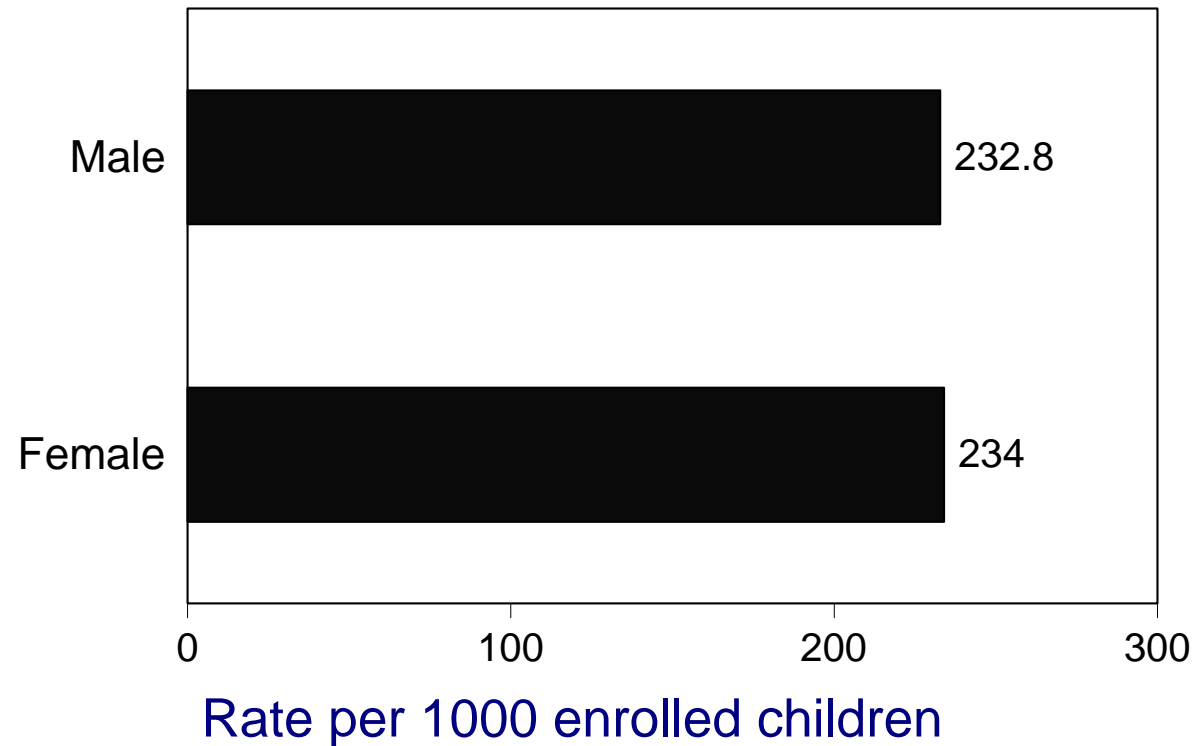
CCFH Program	SSI Children ¹		Foster Children ²	
	Number	Percent	Number	Percent
TOTAL	5,818	100	4,894	100
AGE				
0 - 4	838	14.4	853	17.4
5 - 12	2,426	41.7	1,891	38.6
13 - 17	1,355	23.3	1,469	30.0
18 - 21	1,199	20.6	681	13.9
SEX				
Female	2,120	36.4	2,192	44.8
Male	3,698	63.6	2,702	55.2
RACE				
White	3,004	51.6	3,104	63.4
Black	619	10.6	760	15.5
Asian	87	1.5	56	1.1
Hispanic	1,080	18.6	401	8.2
Am.Ind.	6	0.1	17	0.3
Missing	1,022	17.6	556	11.4
TPL				
No	2,147	36.9	1,828	37.4
Yes	1,949	33.4	1,201	24.5
Missing	1,722	29.6	1,865	38.1

Aid Categories: (See Attachment 1 for definitions)

1 = AB, AD, BD, KD, LD, MD, ME, UD

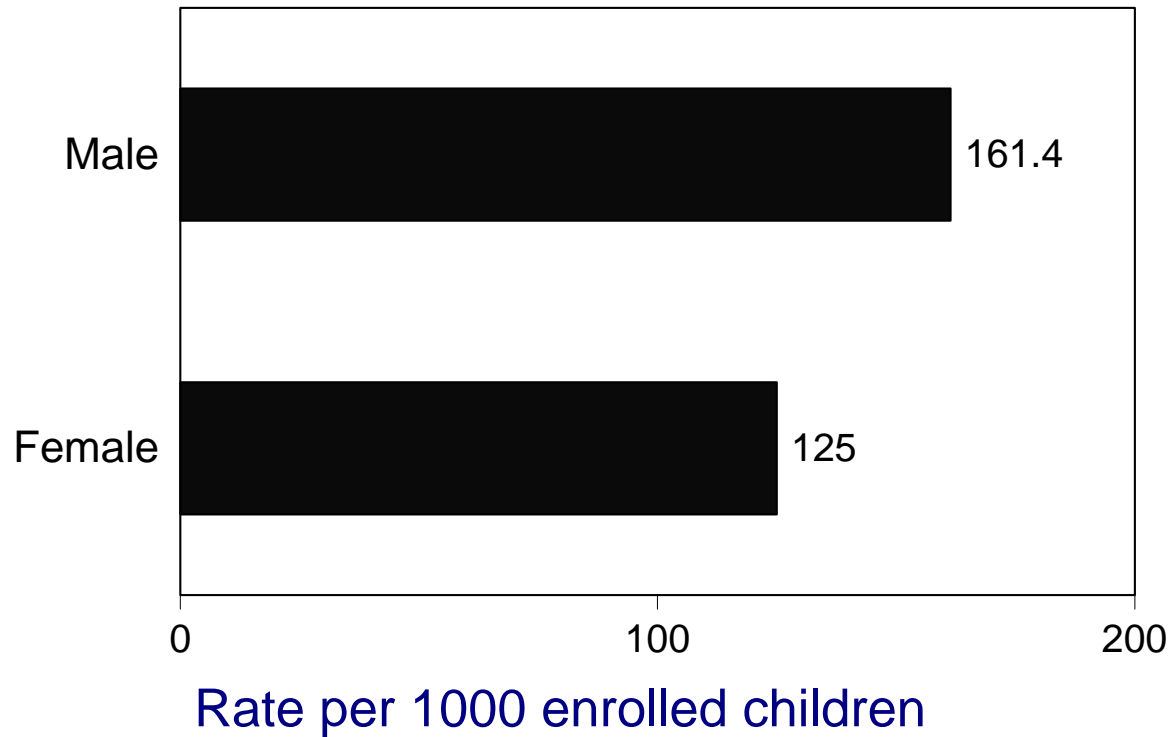
2 = CC, FC, HC, IC, JC, RC

Chart 1: Hospitalization Rates by Gender
for Children on SSI Ages 0-21



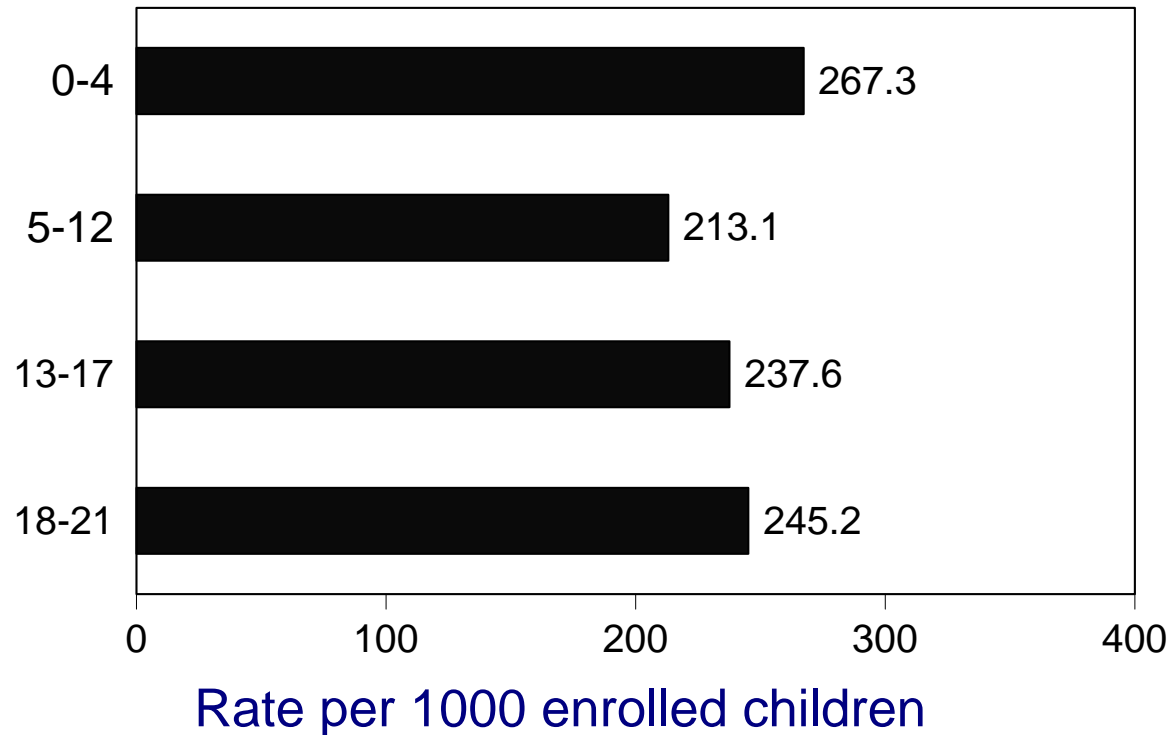
Data Source: Health Indicator Project, Medicaid Data Archive
MMIS extract, CY 1999 (n = 5,818)

Chart 2: Hospitalization Rates by Gender
for Foster Children Ages 0-21



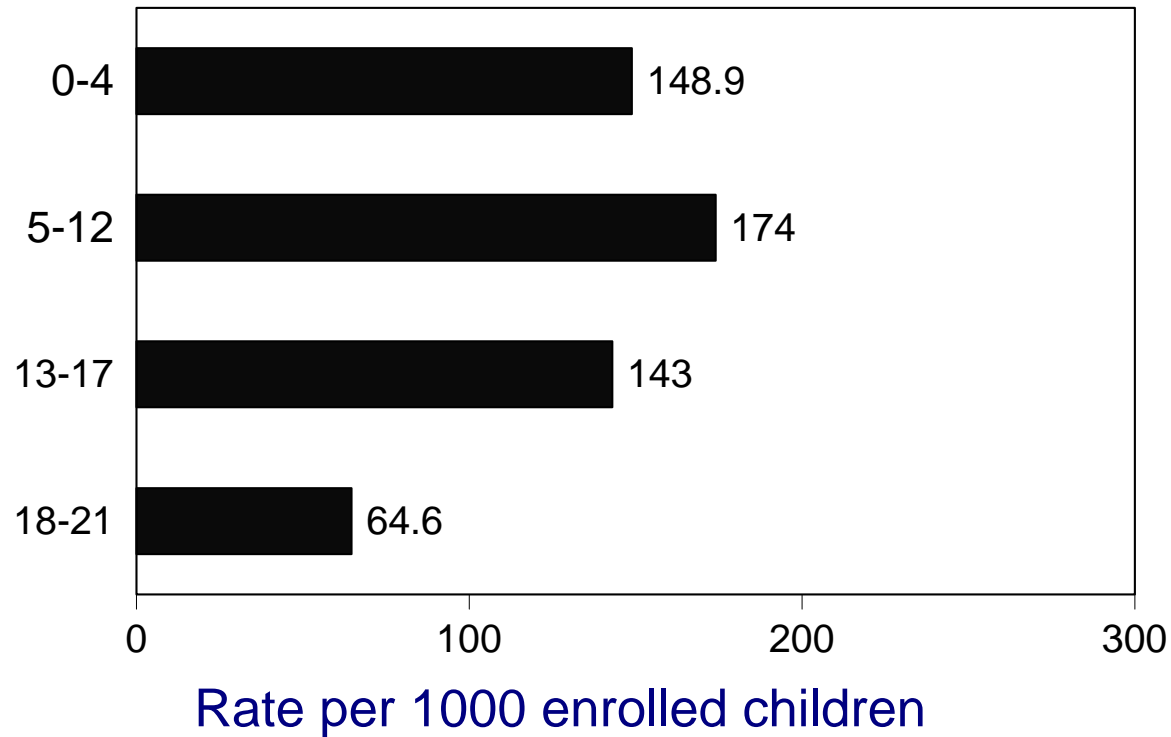
Data Source: Health Indicator Project, Medicaid Data Archive
MMIS extract, CY 1999 (n = 4,894)

Chart 3: Hospitalization Rates by Age
for Children on SSI Ages 0-21



Data Source: Health Indicator Project, Medicaid Data Archive
MMIS extract, CY 1999 (n = 5,818)

Chart 4: Hospitalization Rates by Age
for Foster Children Ages 0-21



Data Source: Health Indicator Project, Medicaid Data Archive
MMIS extract, CY 1999 (n = 4,894)

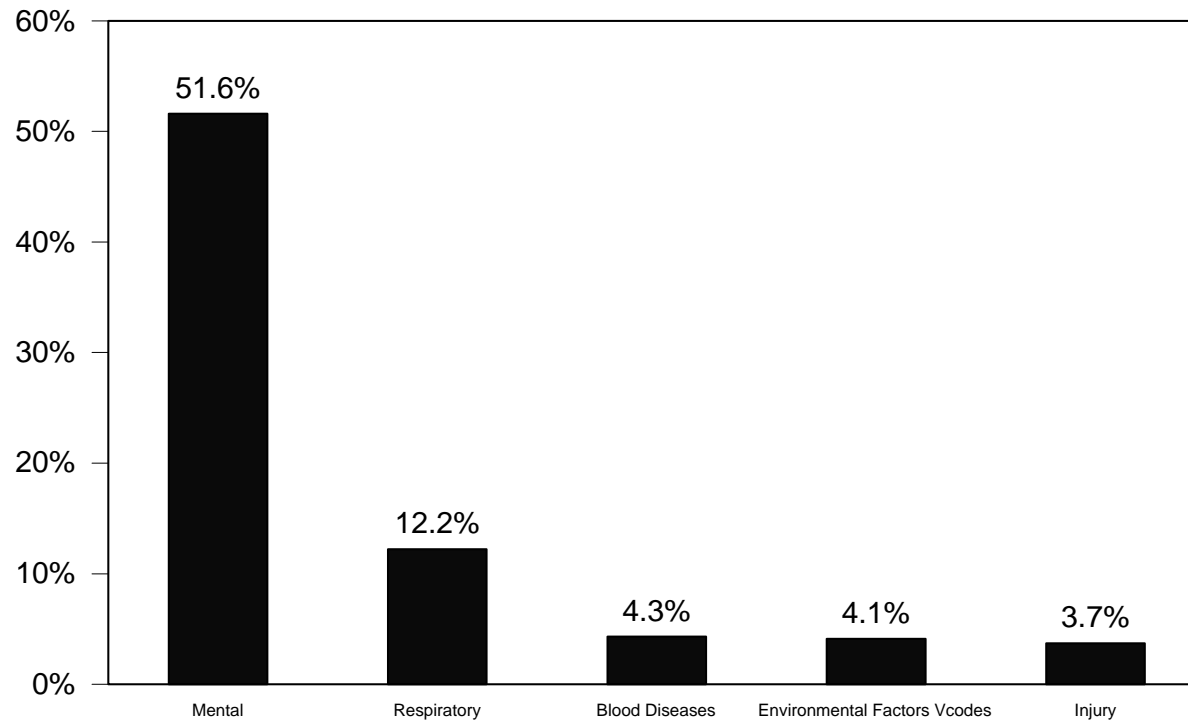
TABLE 2: Hospitalization Rates for SSI and Foster Children and Adolescents ≤ 21 years old on FFS Medicaid – CY1999 by Age, Sex and Race

	SSI Children				Foster Children			
	# Enrolled Children	Total Number of Hospitalizations	Hospital Rate per 1,000 Enrolled Children	Mean Length of Stay	# Enrolled Children	Total Number of Hospitalizations	Hospital Rate per 1,000 Enrolled Children	Mean Length of Stay
TOTAL	5,818	1,357 ¹	233.2	12.2	4,894	710 ²	145.1	13.8
AGE								
0 - 4	838	224	267.3	8.9	853	127	148.9	9.6
5 - 12	2,426	517	213.1	12.8	1,891	329	174.0	18.4
13 - 17	1,355	322	237.6	14.9	1,469	210	143.0	10.5
18 - 21	1,199	294	245.2	10.6	681	44	64.6	6.8
SEX								
Female	2,120	496	234.0	10.6	2,192	274	125.0	11.7
Male	3,698	861	232.8	13.1	2,702	436	161.4	15.1
RACE								
White	3,004	738	245.7	13.7	3,104	451	145.3	14.3
Black	619	127	205.2	6.6	760	109	143.4	12.9
Asian	87	39	448.3	25.4	56	4	71.4	6.8
Hispanic	1,080	255	236.1	8.5	401	42	104.7	10.6
Am.Ind.	6	0	0.0	0	17	0	0.0	0
Missing	1,022	198	193.7	12.3	556	104	187.1	13.9
TPL								
No	2,147	534	248.7	11.9	1,828	307	167.9	13.6
Yes	1,949	344	176.5	15.1	1,201	184	153.2	15.3
Missing	1,722	479	278.2	10.3	1,865	219	117.4	12.8

1 = There were 532 SSI Children (9.1% of total SSI enrolled) who had these 1,357 hospital stays (see table 6)

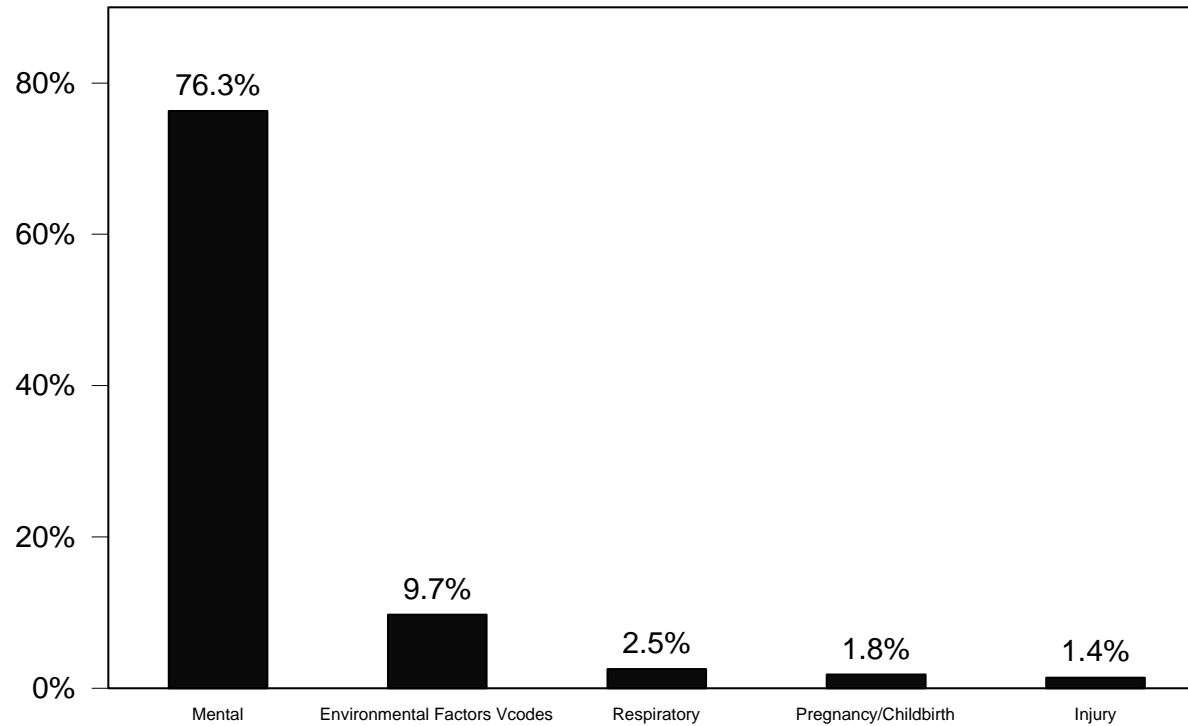
2 = There were 271 Foster children (5.5% of total Foster enrolled) who had these 710 hospital stays (see table 6)

Chart 5: Leading Causes of Hospitalizations for Children on SSI Ages 0-21



Data Source: Health Indicator Project
Medicaid Data Archive, ICD-9 Major Groupings
MMIS extract, CY 1999 (n=1,357)

Chart 6: Leading Causes of Hospitalizations for Foster Children Ages 0-21

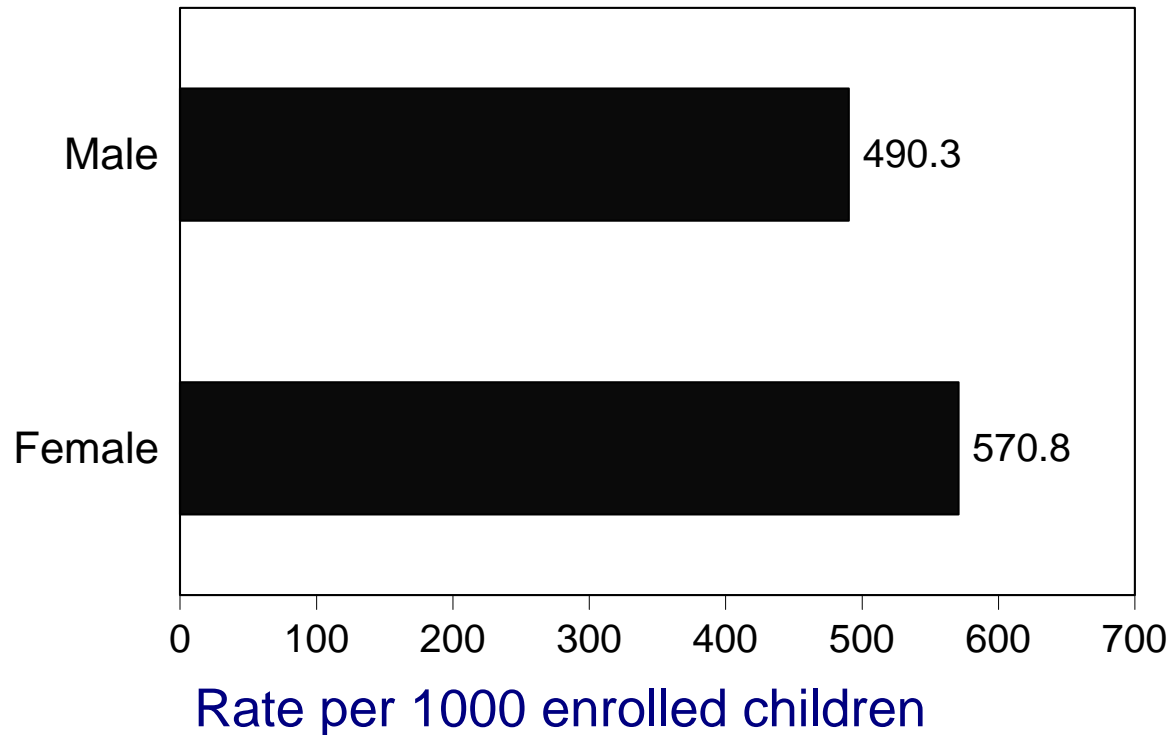


Data Source: Health Indicator Project
Medicaid Data Archive, ICD-9 Major Groupings
MMIS extract, CY 1999 (n=710)

**TABLE 3: Hospitalizations for SSI and Foster Children by Principal Diagnoses Groups
Children and Adolescents ≤ 21 years old on FFS Medicaid – CY1999**

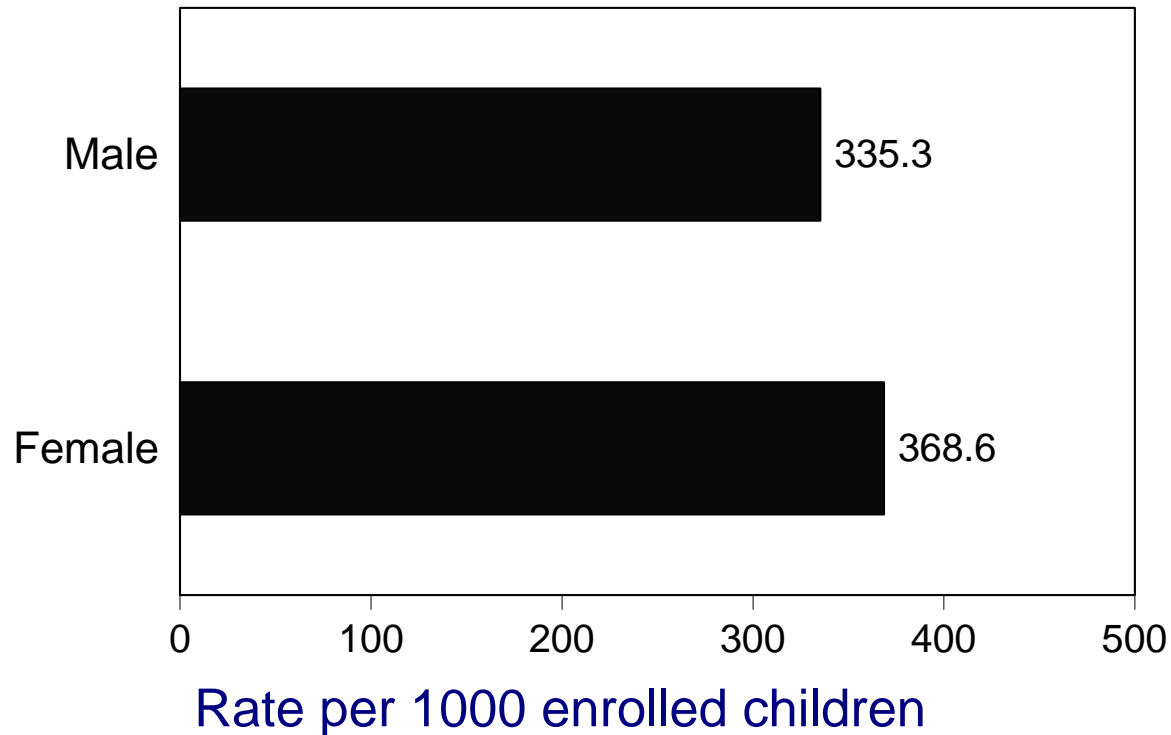
PRINCIPAL DIAGNOSIS	ICD-9 Codes	SSI Children		Foster Children	
		Total Number of Hospitalizations	% of Total Hospitalizations	Total Number of Hospitalizations	% of Total Hospitalizations
TOTAL		1,357	100%	710	100%
Infectious and Parasitic Diseases (1)	001-139	17	1.3%	3	0.4%
Neoplasms (2)	140-239	22	1.6%	2	0.3%
Endocrine, Nutritional and Metabolic Diseases, And Immunity Disorders (3)	240-279	40	2.9%	10	1.4%
Blood and Blood-Forming Organs (4)	280-289	58	4.3%	2	0.3%
Mental Disorders (5)	290-319	700	51.6%	542	76.3%
Nervous System and Sense Organs (6)	320-389	34	2.5%	3	0.4%
Circulatory System (7)	390-459	8	0.6%	0	0
Respiratory System (8)	460-519	165	12.2%	18	2.5%
Digestive System (9)	520-579	40	2.9%	12	1.7%
Diseases of the Genitourinary System (10)	580-629	14	1.0%	4	0.6%
Pregnancy, Childbirth, Puerperium (11)	630-676	39	2.9%	13	1.8%
Infections of Skin and Subcutaneous Tissue (12)	680-709	16	1.2%	4	0.6%
Diseases of the Musculoskeletal System (13)	710-739	15	1.1%	1	0.1%
Congenital Anomalies (14)	740-759	29	2.1%	6	0.8%
Perinatal Conditions (15)	760-779	5	0.4%	3	0.4%
Symptoms, Signs and ill-defined Conditions (16)	780-799	49	3.6%	8	1.1%
Injury and Poisoning (17)	800-999	50	3.7%	10	1.4%
Factors influencing health status (19)	V-Codes	56	4.1%	69	9.7%

Chart 7: Emergency Department Utilization Rates by Gender for Children on SSI Ages 0-21



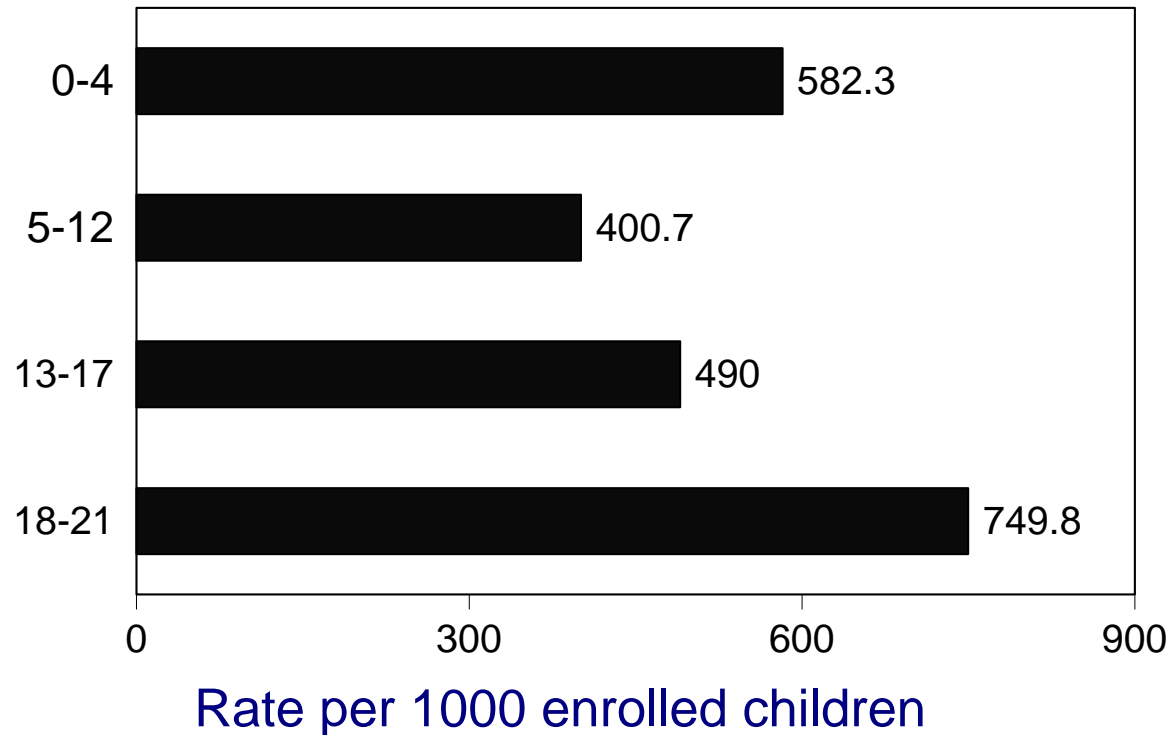
Data Source: Health Indicator Project, Medicaid Data Archive
MMIS extract, CY 1999 (n = 5,818)

Chart 8: Emergency Department Utilization Rates by Gender for Foster Children Ages 0-21



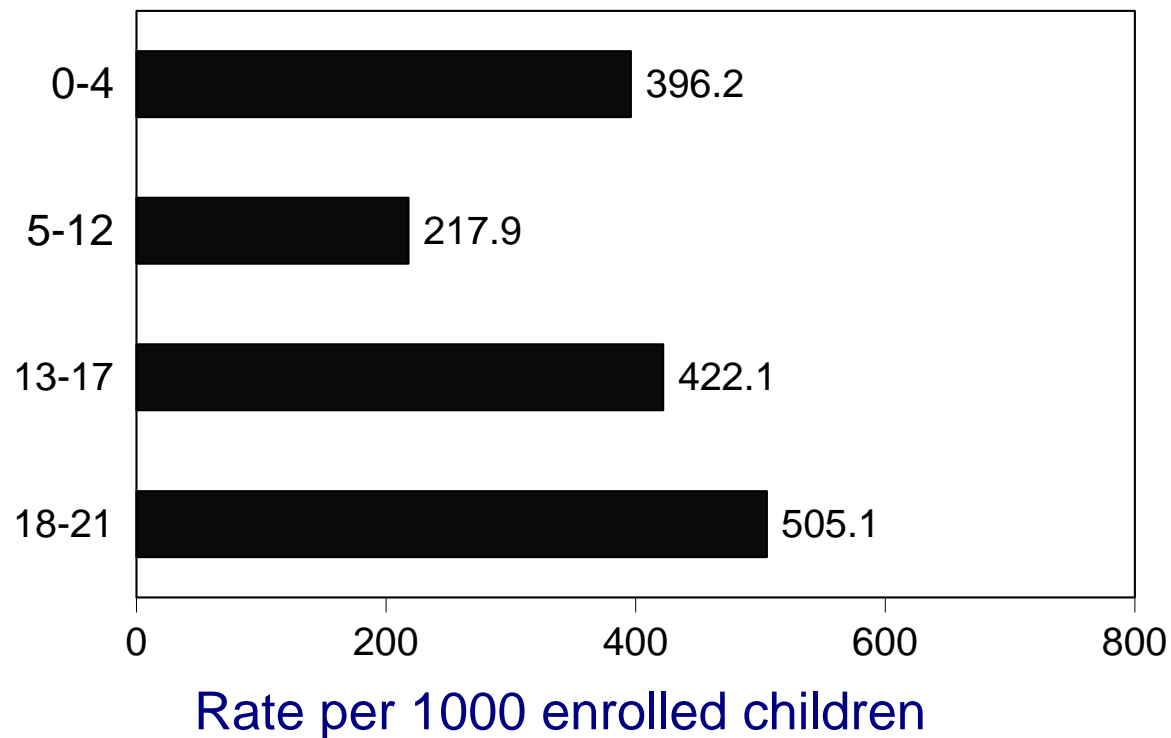
Data Source: Health Indicator Project, Medicaid Data Archive
MMIS extract, CY 1999 (n = 4,894)

Chart 9: Emergency Department Utilization Rates by Age for Children on SSI Ages 0-21



Data Source: Health Indicator Project, Medicaid Data Archive
MMIS extract, CY 1999 (n = 5,818)

Chart 10: Emergency Department Utilization Rates by Age for Foster Children Ages 0-21



Data Source: Health Indicator Project, Medicaid Data Archive
MMIS extract, CY 1999 (n =4,894)

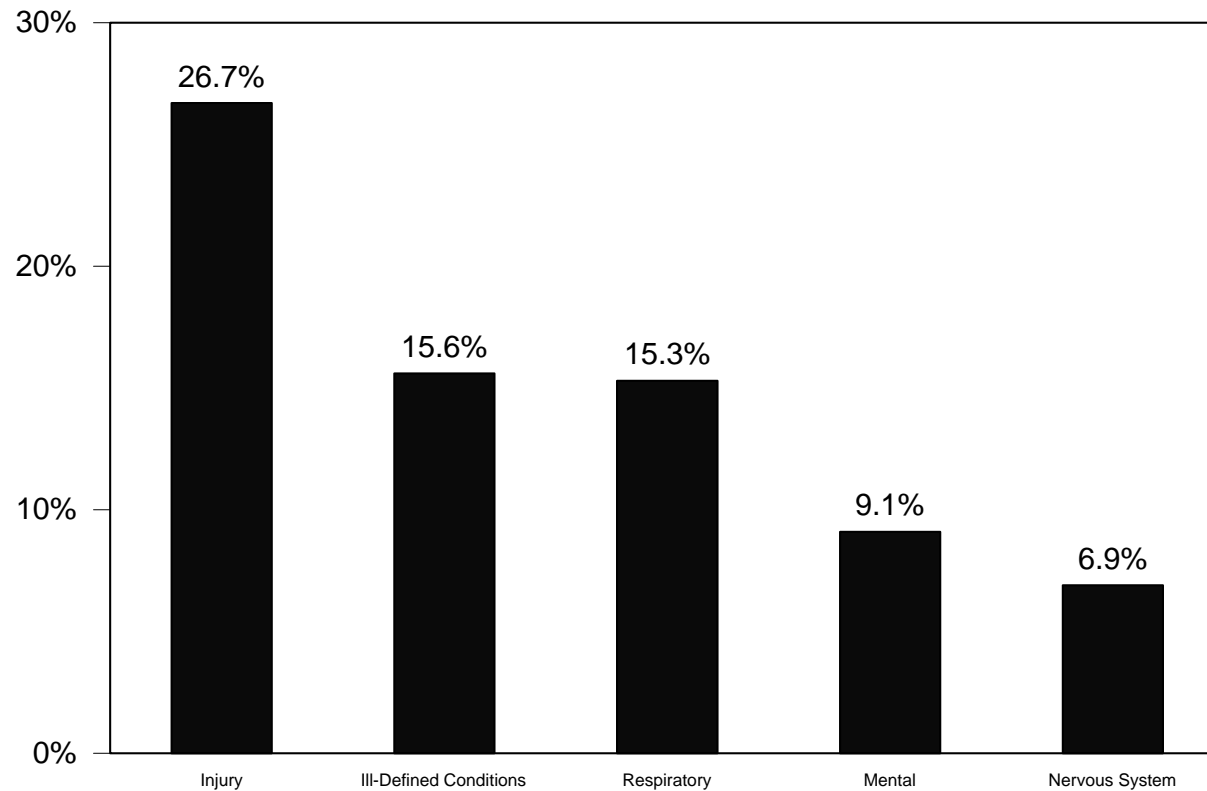
**TABLE 4: Emergency Department Visit Rates for SSI and Foster Children and Adolescents
≤ 21 years old on FFS Medicaid – CY1999 by Age, Sex and Race**

	SSI Children			Foster Children		
	# Enrolled Children	Total Number of ED Visits	ED Rate per 1,000 Enrolled Children	# Enrolled Children	Total Number Of ED Visits	ED Rate per 1,000 Enrolled Children
TOTAL	5,818	3,023 ¹	519.6	4,894	1,714 ²	350.2
AGE						
0 - 4	838	488	582.3	853	338	396.2
5 - 12	2,426	972	400.7	1,891	412	217.9
13 - 17	1,355	664	490.0	1,469	620	422.1
18 - 21	1,199	899	749.8	681	344	505.1
SEX						
Female	2,120	1,210	570.8	2,192	808	368.6
Male	3,698	1,813	490.3	2,702	906	335.3
RACE						
White	3,004	1,602	533.3	3,104	1,095	352.8
Black	619	352	568.7	760	257	338.2
Asian	87	20	229.9	56	21	375.0
Hispanic	1,080	672	622.2	401	156	389.0
Am.Ind.	6	3	500.0	17	4	235.3
Missing.	1,022	374	365.9	556	181	325.5
TPL						
No	2,147	1,421	661.8	1,828	772	422.3
Yes	1,949	614	315.0	1,201	336	279.8
Missing	1,722	988	573.8	1,865	606	324.9

1 = There were 1,547 SSI children (26.6% of total SSI enrolled) who made these 3,023 ED visits

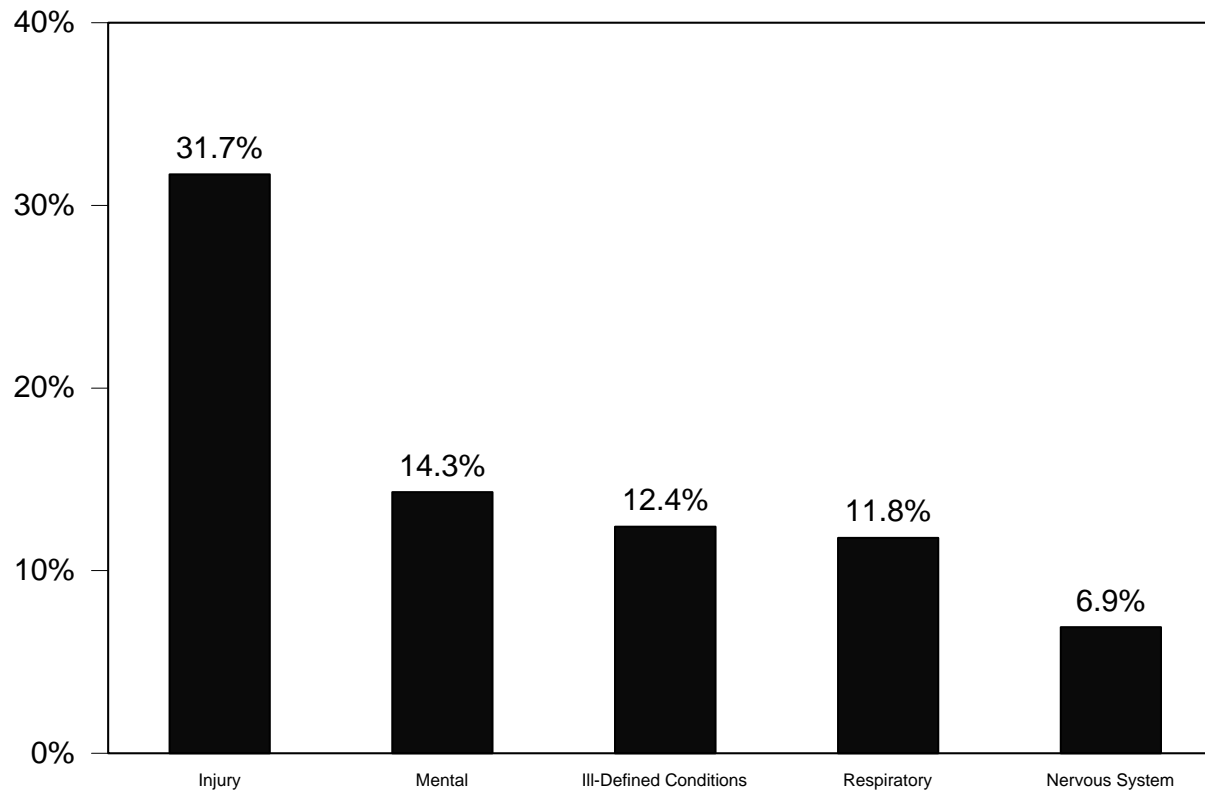
2 = There were 994 Foster children (20.3% of total Foster enrolled) who made these 1,714 ED visits

Chart 11: Leading Causes of Emergency Department Visits for Children on SSI Ages 0-21



Data Source: Health Indicator Project
Medicaid Data Archive, ICD-9 Groupings
MMIS extract, CY 1999 (n=3,023)

Chart 12: Leading Causes of Emergency Department Visits for Foster Children Ages 0-21

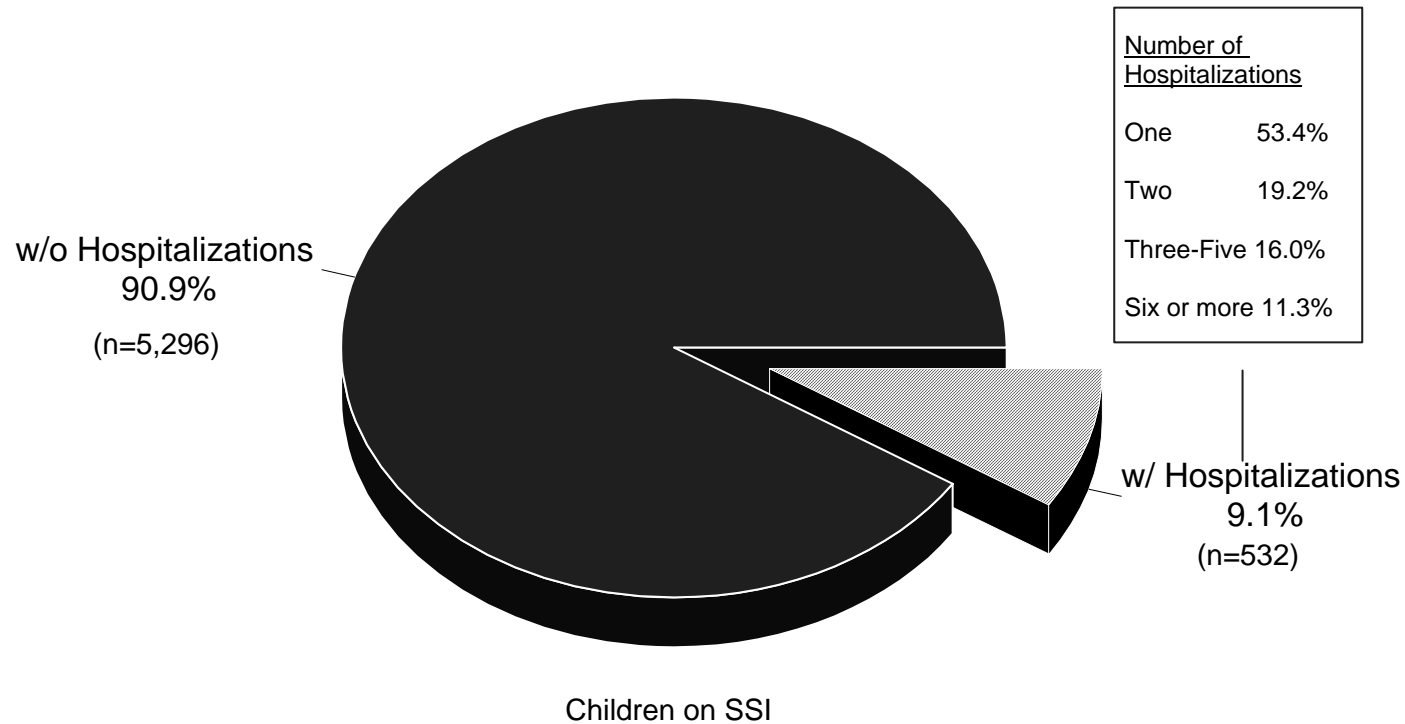


Data Source: Health Indicator Project
Medicaid Data Archive, ICD-9 Groupings
MMIS extract, CY 1999 (n=1,714)

**TABLE 5: Emergency Department Visits for SSI and Foster Children by Principal Diagnoses Groups
Children and Adolescents ≤ 21 years old on FFS Medicaid – CY1999**

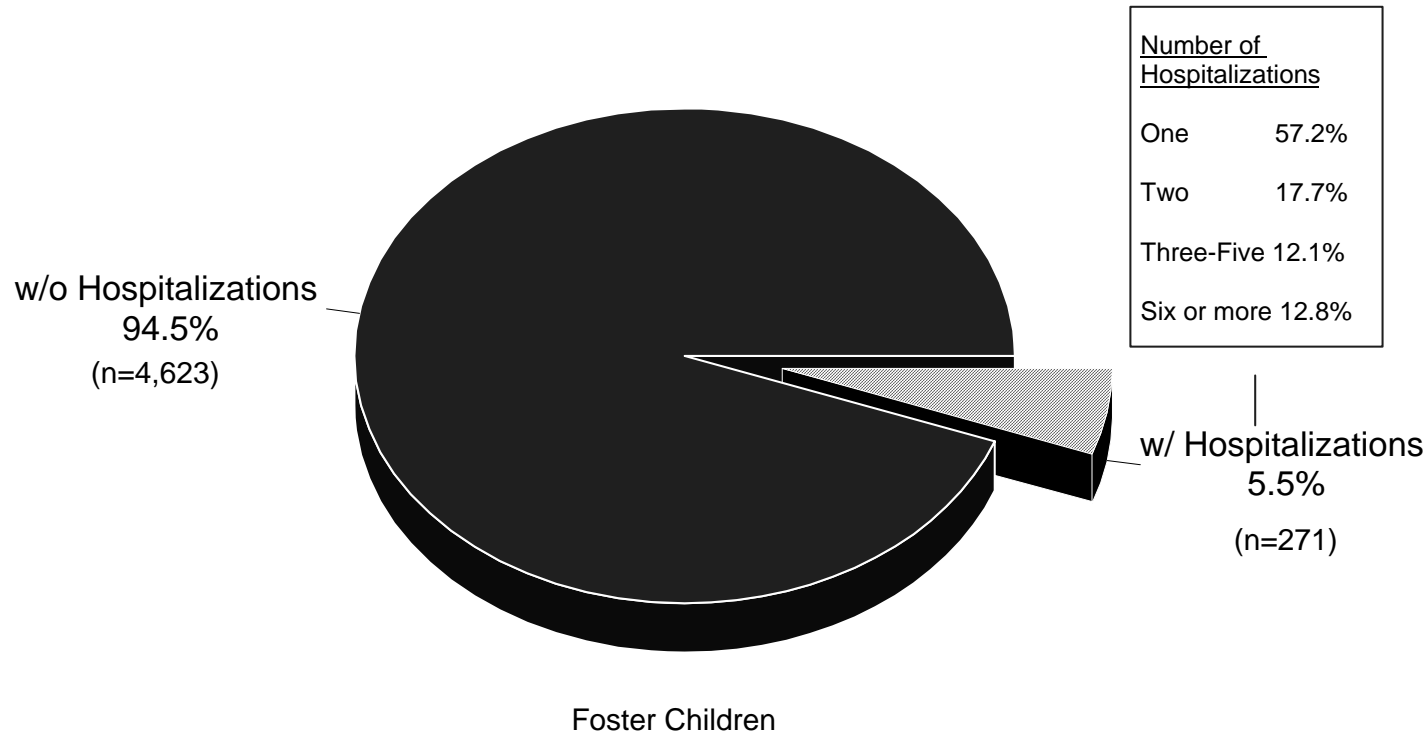
PRINCIPAL DIAGNOSIS	ICD-9 Codes	SSI Children		Foster Children	
		Total Number of ED Visits	% of Total ED Visits	Total Number of ED Visits	% of Total ED Visits
TOTAL					
Infectious and Parasitic Diseases (1)	001-139	162	5.4	76	4.4
Neoplasms (2)	140-239	8	0.3		
Endocrine, Nutritional and Metabolic Diseases, And Immunity Disorders (3)	240-279	59	2.0	16	0.9
Blood and Blood-Forming Organs (4)	280-289	62	2.1	4	0.2
Mental Disorders (5)	290-319	274	9.1	245	14.3
Nervous System and Sense Organs (6)	320-389	210	6.9	118	6.9
Circulatory System (7)	390-459	12	0.4	2	0.1
Respiratory System (8)	460-519	463	15.3	202	11.8
Digestive System (9)	520-579	143	4.7	57	3.3
Diseases of the Genitourinary System (10)	580-629	71	2.3	54	3.2
Pregnancy, Childbirth, Puerperium (11)	630-676	62	2.1	27	1.6
Infections of Skin and Subcutaneous Tissue (12)	680-709	88	2.9	53	3.1
Diseases of the Musculoskeletal System (13)	710-739	60	2.0	27	1.6
Congenital Anomalies (14)	740-759	3	0.1	2	0.1
Perinatal Conditions (15)	760-779	1	0.0	2	0.1
Symptoms, Signs and ill-defined Conditions (16)	780-799	471	15.6	212	12.4
Injury and Poisoning (17)	800-999	807	26.7	544	31.7
Factors influencing Health Status (19)	V-Codes	67	2.2	73	4.3

Chart 13: Percent of Children on SSI with Hospitalizations by Number of Hospitalizations



Data Source: Health Indicator Project
Medicaid Data Archive
MMIS extract, CY 1999

Chart 14: Percent of Foster Children with Hospitalizations by Number of Hospitalizations



Data Source: Health Indicator Project
Medicaid Data Archive
MMIS extract, CY 1999

**TABLE 6: Length of Stay and Cost for SSI and Foster Children
and Adolescents who are Hospitalized
≤ 21 years old Enrolled on FFS Medicaid – CY1999**

	SSI Children ¹		Foster Children ²	
	Number	Percent	Number	Percent
TOTAL	5,818	100	4,894	100
Hospitalized				
Yes	532	9.1	271	5.5
No	5,286	90.9	4,623	94.5
Number of Hospitalizations				
One	284	53.4	155	57.2
Two	102	19.2	48	17.7
3 - 5	85	16.0	33	12.1
6 - 10	44	8.2	24	8.8
11 - 18	17	3.1	11	4.0
Number of Days in Hospital				
1 - 7	266	50.0	115	42.4
8 – 30	156	29.3	89	32.8
31 – 90	62	11.7	29	10.7
91 - 355	48	9.0	38	14.0
Median	7 Days		9 Days	
Amount Paid for Hospitalizations				
< \$5,000	183	34.4	111	41.0
\$5,000 - \$24,000	200	37.6	94	34.6
\$25,000 - \$99,000	101	19.0	44	16.3
\$100,000 - \$434,000	48	9.0	22	8.1
Median	\$8,813		\$6,601	

Attachment 1: Proposed Grouping of CY 1999 FFS Children and Adolescents ages <=21*			
AID CAT	AID Category Description	Number of enrollees	CCFH Code **
AB	SSI active recipient (CAT)	27	1
AD	SSI active recipient (CAT)	5,211	1
BD	SSI (MED)	185	1
CC	Non-IV E Foster child <18	2,384	2
FC	IV E Foster child <18	2,419	2
HC	Non IV E Foster child 18-21	724	2
IC	Non IV E Foster child <18 (MED)	59	2
JC	Non IV E Foster child 18-21 (MED)	4	2
KD	Katie Beckett	6	3
LD	Institutionalized	899	3
MD	SSI (MED)	1	1
ME	SSI (MED)	0	1
RC	Non IV E child subsidized adoption	36	2
WD	Waiver	107	4
TOTAL		12,062	

* Enrolled at any time in CY 1999 (unduplicated count of enrollees)

* CCFH Codes

1 = SSI

2 = Foster Child

3 = Katie Beckett/Institutionalized level of care

4 = Waiver

Note: For data tables in this report CCFH codes 3 and 4 were grouped with 1 because members were too small